

Uterine Fibroids

Fibroids are an abnormal growth of the muscle cells in your uterus. They can be in the uterine cavity, in the muscle wall and on the outside of the uterus. They are almost always not a cancer.

Causes

We don't really know what causes fibroids. What we do know is that they are the overgrowth of a single muscle cell of the uterine wall, and we know that they usually are passed down in families.

Signs and Symptoms

They may cause irregular bleeding if they are in the uterine cavity or the wall of the uterus. They usually won't cause bleeding if they are on the outside of the uterus. They can also affect fertility, by decreasing pregnancy rates and increasing miscarriage rates, but only if they are in the uterine cavity, or very near it, or within the wall of the uterus.

When fibroids become very large, they can also produce problems with functioning of nearby body parts. This can result in problems in urination and bowel movements. They may also cause bloating and abdominal discomfort.

Decision to Treat or Remove Fibroids

About 30% of women ages 13-50 have fibroids. They should only be treated if you are having signs or symptoms that you need to manage.

Many treatment options are available to women that have symptoms resulting from uterine fibroids. These will be discussed from the least to most invasive options:

1. Do Nothing

Fibroids are benign tumors that very rarely become cancer. As many as 30% of all women have at least 1 fibroid. Thus, we only treat women for fibroids if they have a specific problem due to these growths. Such problems include excessive or irregular menstrual bleeding, infertility, recurrent miscarriage, preterm labor, malpresentation of a fetus during pregnancy, constipation or pelvic pain. If you do not suffer from any of these problems, or if they are not severe enough for you to seek treatment, then observation and regular checkups may be all you need to do. Since these fibroids grow in response to hormones secreted from the ovaries, once you reach menopause, and your ovaries are no longer functional, the fibroids usually shrink on their own.

2. Medical Therapy

A number of medical treatments are available to reduce the size of fibroids and, in doing so, frequently decrease the symptoms caused by them. Lupron, an injection that can last from 1-3 months, causes a temporary medical menopause and can reduce the volume of the fibroid by about

50%; the addition of a drug called Evista® will cause the fibroid to shrink even more. **Ulipristal and Elagolix are two newer drugs that also can be used to treat these tumors.** However, these drugs have side effects such as hot flashes (**Lupron, elagolix**), mood changes (**all of the above**) and the absence of menstrual periods while you are taking them (**all of the above in some situations**). Also, the fibroids remain small only while you are taking the medication, and once you stop the drugs, the fibroids **may** return to their original size within a few months, **although in some cases the effect will last longer**. Medical therapy is mostly helpful prior to surgery: it may allow the surgery to be performed more quickly and safely. It is also useful if a woman is near the menopause herself.

3. Surgical Therapy

a. Endometrial ablation

Destruction of the lining of the uterus is a method of treatment that is effective for women who are having bleeding problems from fibroids. The procedure can be performed in the operating room with general anesthesia. The technique is to burn, freeze, or remove the lining, thus preventing most menstrual bleeding from occurring. It requires about 45 minutes, and is performed by placing an instrument through the vagina and cervix and into the uterine cavity. No incisions are required. Recovery is very rapid, usually only a few hours. This procedure is not appropriate for women who desire future childbearing or who have fibroid symptoms other than bleeding.

b. Myolysis

Myolysis means that the fibroids are not removed, but merely heated or cooled to a very extreme temperature while left in place in the uterus. This causes the fibroid to shrink and the symptoms to get better. One problem with all of the myolysis procedures is the effect upon subsequent pregnancies is not well understood. In fact, there is some information that pregnancies in women after they have had myolysis can be dangerous to the baby and to the woman herself. If childbearing is a priority for you, then we would not recommend myolysis. There are a number of different types of myolysis techniques available, **including the use of high energy ultrasound directed by imaging studies using ultrasound or magnetic resonance imaging.**

i. Uterine Artery Embolization

This is a technique performed by the Interventional Radiologists. An incision is made in your thigh, and a small tube is threaded through your blood vessels to the uterus while the Radiologist watches on X-Ray. Small plastic particles are then ejected into the blood vessel to plug it up. This is usually done on the right and left side of the body. This lack of blood causes the fibroids to shrink, and symptoms get better about 80% of the time. The side effects include pain, which may last for as long as a week. Sometimes, you will lose your periods all together after this procedure. Your ovaries may also be affected causing early menopause. The advantage of this procedure is that it does not require surgery.

ii. Laparoscopic uterine artery ligation

Using minor surgery, a gynecologist can insert a telescope and small instruments into your abdomen. Once there, the blood vessels to the uterus are identified and then either tied, clipped or burned. Results are virtually identical to uterine artery embolization. The procedure requires 3 small incisions on your abdomen, and usually takes about 1 hour. General anesthesia is needed. Recovery is generally hours to days, and within 1 week you should be back to normal.

iii. Laparoscopic myolysis

Instead of damaging the blood supply to the fibroids and uterus, a gynecologist can directly destroy the fibroid tissue. This is also done with minor surgery, with 3 small abdominal incisions and general anesthesia. The technique involves inserting instrumentation directly into the fibroids, one at a time, and destroying them with heat (via electrical energy or laser) or freezing. The procedure requires about 1½ hours, and produces results similar to uterine artery embolization. Complications include pain or bleeding following surgery, although these are not common. Recovery is similar to laparoscopic uterine artery ligation.

c. Myomectomy

Removal of fibroids (myomectomy) and subsequent repair of the uterus can be accomplished by a variety of techniques, depending upon the location, size, and number of fibroids to be removed. If you are considering future childbearing, this is the safest method for you to use to treat your fibroids.

i. Hysteroscopic myomectomy

When fibroids are mostly within the inside cavity of the uterus, they can be reached by placing a telescope and instruments through the vagina and cervix and into the uterine cavity. No incisions are required, although general anesthesia is needed. An electrical loop is used to carve out the fibroid, piece by piece. The procedure can take anywhere from 20 minutes to 2 hours depending upon the size of the fibroid. Recovery is rapid; you should feel back to normal in a matter of hours. One problem is that for large fibroids, the procedure may not be able to be completed in a single setting. Occasionally, a second surgery is required. Another problem is that many fibroids cannot be removed by this technique, and require other methods of access.

ii. Laparoscopic myomectomy

For fibroids within the wall of the uterus or on the outside of the uterus, removal can be accomplished through minor surgery involving general anesthesia. Three or four incisions are usually required, each ½ inch long. The surgery can take from 1-4 hours, depending upon the size and number of fibroids. The biggest danger is excessive bleeding; if this occurs, we will make a large abdominal incision to keep you safe and complete the surgery that way. Recovery requires about 2-7 days, and is done at home. You will only be kept overnight in the hospital if we feel we need to observe you, you are having trouble with nausea, or it is late in the day when the surgery is completed. In some cases the robot is used to help make the surgery go smoother.

iii. Abdominal myomectomy

When fibroids are too numerous, or too large to remove through a laparoscope, major surgery is required. This procedure, an abdominal myomectomy, requires an incision along the lower abdomen (a bikini cut), and is usually 6-12 inches in length. This surgery requires several hours to perform, is done with general anesthesia, and mandates a lengthy recovery: generally 2 days of hospitalization and 2-6 weeks of at-home recovery. The uterus is healed and ready for a pregnancy 3 months later. For difficult cases, there is a risk of bleeding or infection, but this is not a major problem with most myomectomies.